FORM PTO-1390 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371

ATTORNEY'S DOCKET NO.
PHN 17,651

U.S. Application No. (if known, see 37 CFR 1.5)
09/857310

INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED
PCT/EP00/09484	September 26, 2000	October 1, 1999

TITLE OF INVENTION
MAGNETIC RESONANCE IMAGING METHOD

APPLICANT(S) FOR DO/EO/US
JOHANNES JACOBUS VAN VAALS

Applicant(s) herewith submit to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. [X] This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.

2. [ ] This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.

3. [ ] This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).

4. [ ] A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.

5. [X] A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
   a. [X] is transmitted herewith (required only if not transmitted by the International Bureau).
   b. [ ] has been transmitted by the International Bureau.
   c. [ ] is not required, as the application was filed in the United States Receiving Office (RO/US).

6. [ ] A translation of the International Application into English (35 U.S.C. 371(c)(2))

7. [X] Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
   a. [X] are transmitted herewith (required only if not transmitted by the International Bureau).
   b. [ ] have been transmitted by the International Bureau.
   c. [ ] have not been made; however, the time limit for making such amendments has NOT expired.
   d. [ ] have not been made and will not be made.

8. [ ] A translation of the amendment to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).

9. [X] An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).

10. [ ] A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 16. Below concern document(s) or information included:

11. [X] An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98.

12. [X] An assignment document for recording. A separate cover sheet is compliance with 37 C.F.R. 3.28 and 3.31 is included.

13. [X] A FIRST preliminary amendment.
    [ ] A SECOND OR SUBSEQUENT preliminary amendment.

14. [ ] A substitute specification.

15. [X] A change of power of attorney and/or address letter.

16. [X] Other items or information:
    2 SHEETS OF DRAWING
    CHARGE AUTHORIZATION

CERTIFICATE OF EXPRESS MAILING

Express Mail Mailing Label No. EL 686 948 895
Date of Deposit June 1, 2001

I hereby certify that this paper and/or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

Valerie Deas — Valerie Deas
Typed Name — Signature

JC05 Rec'd PCT/PTO 0 1 JUN 2001

U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5)	INTERNATIONAL APPLICATION NO.	ATTORNEY'S DOCKET NUMBER
09/857310	PCT/EPOO/09484	PHN 17,651

17 [ ] The following fees are submitted:		CALCULATIONS (PTO USE ONLY)	
BASIC NATIONAL FEE (37 C.F.R. 1.492(A)(1)-(5)):			
Search Report has been prepared by the EPO or JPO	$940.00		
International preliminary-examination fee paid to USPTO (37 C.F.R. 1.482)	$720.00		
No international preliminary examination fee paid to USPTO (37 C.F.R. 1.482) but international search fee paid to USPTO (37 C.F.R. 1.445(a)(2)	$760.00		
Neither international preliminary examination fee (37 C.F.R. 1.482) nor international search fee (37 C.F.R. 1.445(a)(2)) paid to USPTO	$970.00		
International preliminary examination fee paid to USPTO (37 C.F.R. 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4)	$96.00		
ENTER APPROPRIATE BASIC FEE AMOUNT =		$970.00	
Surcharge of $130.00 for furnishing the oath or declaration later than [ ] 20 [ ] 30 months from the earliest claimed priority date (37 C.F.R. 1.492(e)).		$970.00	

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total Claims	12 - 20 =	0	X $ 18.00	$	
Independent claims	4 - 3 =	1	X $ 78.00	$78.00	
MULTIPLE DEPENDENT CLAIMS (if applicable)		1	+ $260.00	$ 260.00	
TOTAL OF ABOVE CALCULATIONS =				$1208.00	
Reductions by 1/2 for filing by small entity, if applicable. Verified Small Entity Statement must also be filed (Note 37 C.F.R. 1.9, 1.27, 1.28)				$	
SUBTOTAL =				$1208.00	
Processing fee of $130.00 for furnishing the English translation later than [ ] 20 [ ] 30 months from the earliest claimed priority date (37 C.F.R. 1.492(f)). +				$	
TOTAL NATIONAL FEE =				$	
Fee for recording the enclosed assignment (37 C.F.R. 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 C.F.R. 3.28,3.31). $40.00 per property +				$ 40.00	
TOTAL FEES ENCLOSED =				$	
				Amount to be Refunded	$
				Charged	$1242.00

a. [ ] A check in the amount $_____ to cover the above fees is enclosed.

b. [X] Please charge my Deposit Account No. 14-1270 in the amount of $1242.00 to cover the above fees. A duplicate copy of this sheet is enclosed.

c. [X] The Commissioner is hereby authorized to charge any additional fee, with the exception of the Base Issue Fee, which may be required, or credit any overpayment to Deposit Account No. 14-1270. A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 C.F.R. 1.494 or 1.495 has not been met, a petition to revive (37 C.F.R. 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

(SIGNATURE)

Corporate Patent Counsel
Philips Electronics North America Corporation
80 White Plains Road
Tarrytown, NY 10591

MICHAEL E. MARION
(NAME)

32,266
(REGISTRATION NUMBER)

Magnetic resonance imaging method

The invention relates to a magnetic resonance imaging method. In order to form a magnetic resonance image of an object, the object is arranged in a steady, as uniform as possible magnetic field. Often only a part of the object is imaged; to this end, the part of the object to be imaged is then arranged in the steady magnetic field. The steady magnetic field orients spins in the object to be examined predominantly in the direction of the steady magnetic field. According to such a magnetic resonance imaging method, spins in an object to be examined are excited. Relaxation of the excited spins produces magnetic resonance signals which are acquired. A magnetic resonance image is reconstructed from the magnetic resonance signals acquired.

A magnetic resonance imaging method of this kind is known from United States patent No. 5,378,987.

The known magnetic resonance imaging method is dedicated notably to measurement, on the basis of the magnetic resonance signals, of a temperature distribution in the object to be examined. The cited United States patent deals with the problems caused by displacements of the object to be examined. The cited United States patent mentions notably that the measured temperature distribution may be spoiled by displacement of the object to be examined. The known magnetic resonance imaging method offers a rather cumbersome, time-consuming solution to this problem. The known magnetic resonance imaging method notably necessitates the execution of separate magnetic resonance excitation sequences for the detection of displacements of the object and for the measurement of the frequency shift due to variation of the temperature, referred to as "chemical shift data", respectively. According to the known magnetic resonance imaging method, such magnetic excitation sequences must both be repeated for different values of the echo time in the measurement of the chemical shift.

It is an object of the invention to provide a magnetic resonance imaging method wherein it is comparatively simply achieved that hardly any disturbances occur due to motions of the object to be examined.

This object is achieved by means of a magnetic resonance imaging method according to the invention wherein